alkaline solutions, dilute coolant with oil residue, and wastes containing low concentrations of metals including copper, beryllium, chromium, nickel, and/or zinc. The majority of these wastes contain radioactive constituents and are consequently treated as mixed wastes. The area is also used to store solid waste generated by the wastewater filtration unit as well as empty tanks. The total storage capacity for the area is 22,050 gallons or approximately 400 55-gallon drums.

B.2 PURPOSE AND NEED

The NNSA needs to enhance the efficiency and safety of its current waste operations. NNSA proposes to meet its need by preparing a series of permit modifications, phasing out older facilities, and increasing operations to the design capabilities of the DWTF. The DWTF would continue to consolidate current waste operations, provide a facility to conduct hazardous operations, provide for the treatment and processing of stored wastes, improve waste minimization, and fully implement facility capabilities for waste treatment, storage, and processing. This centralized facility would concentrate like activities in one area, thus providing safer and more efficient working conditions. Other facilities (Area 612 Complex and Site 300 RHWM Facilities) would continue to treat, store, and process waste in support of LLNL programs and missions.

The proposed modifications are evaluated in this LLNL SW/SPEIS because of the integral nature of the radioactive and hazardous waste management operations to the overall LLNL mission. This appendix serves as the NEPA documentation for these modifications. One purpose of this appendix is to provide the NNSA decisionmaker, the DTSC, and the public with permit modification-specific information in one report, even though the impact analysis also appears under the individual environmental resources and issue areas of this LLNL SW/SPEIS.

B.3 DESCRIPTIONS OF THE NO ACTION ALTERNATIVE, PROPOSED ACTION, AND REDUCED OPERATION ALTERNATIVE FOR WASTE MANAGEMENT

CEQ regulations (40 CFR Parts 1500-1508) require that DOE and other Federal agencies use the review process established by NEPA, as amended (42 U.S.C. §4321 et seq.), and the DOE regulations implementing NEPA (10 CFR Part 1021) to evaluate not only the Proposed Action, but also to identify and review reasonable alternatives to the Proposed Action, as well as a No Action Alternative. This comprehensive review ensures that environmental information is available to public officials and citizens before decisions are made and before actions are taken.

NNSA developed the No Action Alternative, Proposed Action, and Reduced Operation Alternative to accomplish this action and to assess environmental impacts of waste management activities at LLNL. This appendix examines and compares the No Action Alternative, Proposed Action, and Reduced Operation Alternative. LLNL activity descriptions, by facility, are also provided. All of the activities discussed in this appendix were used in evaluating the impacts of each alternative presented in Chapter 3 of the LLNL SW/SPEIS. The alternatives are defined in the following sections:

- No Action Alternative (Section B.3.1)
- Proposed Action (Section B.3.2)
- Reduced Operation Alternative (Section B.3.3)

Appendix B-24 March 2005